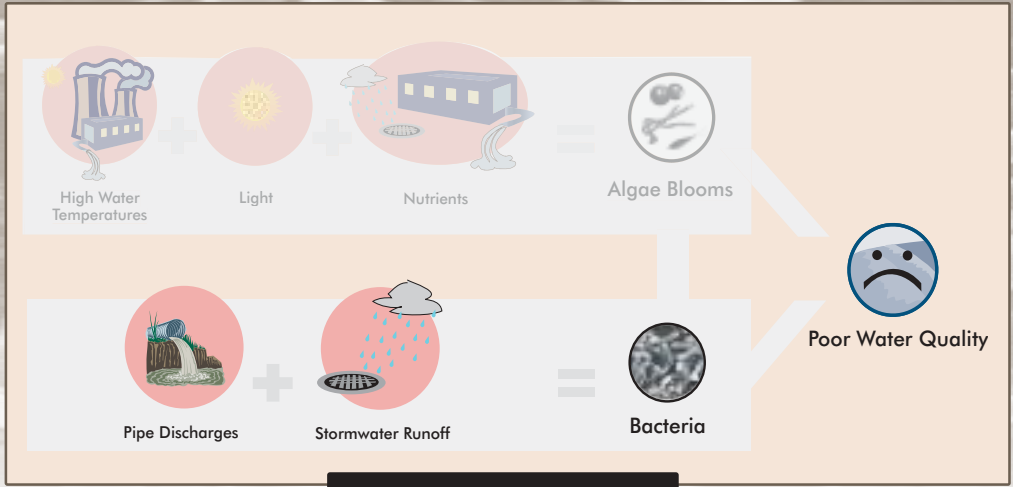


Science Solving Problems on the Charles



Bacteria

How is the problem being assessed

Monitoring, Sampling, and Assessment

CWRA, EPA, MWRA, USGS Studies:

Bacteria Loads
Computer Modeling
DNA Source Tracking
Salinity
Sampling
Sediment
Stormwater Management

Charting bacteria behavior in the river



Biology, Chemistry, and Physics

How much bacteria can the river handle?

Diet designed to lose bacteria through TMDL

TMDL (total maximum daily load) Plan

- Remove enough bacteria to achieve water quality goals
- Divide bacteria "cuts" among pollution sources
- Public input

TMDL Plan Implemented

TMDL Plan Implemented

- NPDES Permitting
- CSO controls
- Aggressive stormwater management
- Removal of illegal sources of bacteria
- Other strategies driven by DNA study

Impacts boating & swimming